

REMARKS

Claims 1 and 9 have been amended, and claim 14-15 have been added. Claims 1-2 and 4-15 remain for further consideration. No new matter has been added.

The objections and rejections shall be taken up in the order presented in the Official Action.

1. Claims 1, 4 and 5 currently stand rejected for allegedly being anticipated by U.S. Patent 3,663,870 to Tsutsumi (hereinafter "Tsutsumi").

The Official Action contends Tsutsumi discloses "[t]he semiconductor device comprises a gas sensitive field effect transistor that comprises a substrate" and "a gas sensitive layer comprising inorganic metal oxide". (Official Action, pg. 2). However, it is respectfully submitted that these contentions are technically incorrect and based upon an overly broad reading of Tsutsumi. Specifically, Tsutsumi merely discloses a semiconductor passivated with a rare earth oxide layer. There is no layer in the semiconductor of Tsutsumi that is used for detecting alcohol. **Alcohol is not even mentioned in Tsutsumi.** Tsutsumi merely discloses gas in the context of fabricating the semiconductor device, and nothing about detecting an alcohol during operation of the semiconductor. A 35 U.S.C. §102 rejection requires that a single prior art reference disclose each feature of the claimed invention. It is respectfully submitted that Tsutsumi is incapable of anticipating the subject matter of claim 1 since it fails to disclose an alcohol sensor that includes a gas-sensitive layer for detecting alcohol.

The rejection of claims 4 and 5 is moot since they depend from claim 1, which is patentable for at least the reasons set forth above.

2. Claims 1 and 2 currently stand rejected for allegedly being anticipated by DE Patent 4028062 (hereinafter “Wenker”).

Claim 1 recites an alcohol sensor that comprises a gas-sensitive layer for detecting alcohol. The Official Action contends Wenker discloses “...*a substrate having a source and a drain that are physically separate to the gate electrode in that the insulation film provide the physical separate.*” (Official Action, pg. 7). It is respectfully submitted that the claimed invention as a whole is not being properly considered. Specifically, claim 1 recites:

“...at least one gas-sensitive field-effect transistor which comprises at least one substrate having source and drain areas and at least one gate electrode located at a distance from the source and drain areas such that a vacant space between the gate electrode on the one hand and the source and drain areas on the other hand is formed,

wherein a gas-sensitive layer for detecting alcohol comprising a polymer or an inorganic metal oxide is applied to the gate electrode such that the vacant space is located between the gas-sensitive layer on the one hand and the source and drain areas on the other hand.”

As set forth above, the Official Action contends that claimed vacant space reads on an insulator layer of Wenker (see Official Action, pg. 7). As known, the term “vacant” is defined as “1. *as having no contents; empty.* 2. *not occupied or taken; a vacant job.*” The Random House College Dictionary, Revised Edition, 1984, ISBN 0-394-43600-8. In a semiconductor device, an insulator layer is an actual physical layer, such as of silicon dioxide. In contrast, the alcohol sensor of the claimed invention recites the feature that the space located between the gas-sensitive layer and the source/drain is vacant. Gas to be tested is allowed to flow into this vacant space in order to be tested for the presence of alcohol. Examination of the figures of Wenker clearly reveals that there is no vacant space as recited in claim 1, since each cross-sectional section above the substrate is cross hatched, and thus there is no vacant space between the

semiconductor layers illustrated in Wenker. A 35 U.S.C. §102 rejection requires that a single prior art reference disclose each feature of the claimed invention. It is respectfully submitted that Wenker is incapable of anticipating the subject matter of claim 1 since it fails to disclose structure that provides for vacant space

3. Claims 1, 6, 7 and 10 currently stand rejected for allegedly being anticipated by U.S. Patent 4,638,346 to Inami (hereinafter “Inami”).

Claim 1 recites an alcohol sensor that comprises a gas-sensitive layer for detecting alcohol. Inami never discloses the detection of alcohol, and specifically never discloses a gas-sensitive layer for detecting alcohol.

Although the Official Action contends that the subject matter of claim 1 is anticipated by Inami, the Official Action fails to even identify where in Inami there is any structure operable as an alcohol sensor, and more specifically where there is structure such as the claimed a gas-sensitive layer for detecting alcohol. Inami discloses detecting moisture—claim 1 of the present application is directed to an alcohol sensor – detecting moisture is not the same as detecting alcohol. A 35 U.S.C. §102 rejection requires that a single prior art reference disclose each feature of the claimed invention. It is respectfully submitted that Inami is incapable of anticipating the subject matter of claim 1 since it fails to disclose detecting alcohol.

The rejection of claims 6, 7 and 10 is moot since they depend from claim 1, which is patentable for at least the reasons set forth above.

4. Claims 7-9 currently stand rejected for allegedly being obvious in view of the combined subject matter disclosed in Wenker and Inami.

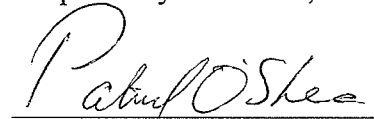
It is respectfully submitted that this rejection is now moot since these claims depend from claim 1, which is patentable for at least the reasons set forth above.

5. The indication that claims 11 and 12 are allowed is noted and appreciated.

For all the foregoing reasons, reconsideration and allowance of claims 1-2 and 4-15 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,

A handwritten signature in cursive script, reading "Patrick O'Shea", written over a horizontal line.

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